

**WHAT IS CLAIMED IS:**

1. An input/output node for a computer system comprising:
  - 5 a first receiver unit configured to receive a first command on a first communication path;
  - a first transmitter unit coupled to transmit a first corresponding command that corresponds to said first command on a second communication path;
- 10 a second receiver unit configured to receive a second command on a third communication path;
- a second transmitter unit coupled to transmit a second corresponding command that corresponds to said second command on a fourth communication path; and
- 15 a bridge unit coupled to receive selected commands from said first receiver and said second receiver and configured to transmit commands corresponding to said selected commands upon a peripheral bus.
- 20
- 25 2. The input/output node as recited in claim 1 further comprising a control unit coupled to control the conveyance of commands from said first communication path to said second communication path and to said peripheral bus, and from said third communication path to said fourth communication path and to said peripheral bus.

3. The input/output node as recited in claim 2, wherein said control unit is further configured to control the conveyance of commands from said peripheral bus to said second communication path and said fourth communication path.

5 4. The input/output node as recited in claim 3, wherein said bridge unit is further configured to selectively provide commands corresponding to commands received from said peripheral bus to said first transmitter and said second transmitter.

10 5. The input/output node as recited in claim 4, wherein said control unit is further configured to selectively control the conveyance of said commands based upon a plurality of control commands received from said first receiver, said second receiver and said bridge unit.

15 6. The input/output node as recited in claim 5, wherein each of said control commands contains a subset of a corresponding command received by said first and second receivers and said bridge unit.

20 7. The input/output node as recited in claim 6, wherein said control unit is further configured to receive said control commands via a control command bus.

8. The input/output node as recited in claim 1, wherein said peripheral bus is a peripheral component interconnect (PCI) bus.

25 9. The input/output node as recited in claim 1, wherein said peripheral bus is a graphics bus.

10. The input/output node as recited in claim 1, wherein said first and third communication paths and said second and fourth communication paths are HyperTransport™ links.

5 11. A computer system comprising:

one or more processors;

10 one or more input/output nodes connected together and to said one or more processors, each of said input/output nodes including:

a first receiver unit configured to receive a first command on a first communication path;

15 a first transmitter unit coupled to transmit a first corresponding command that corresponds to said first command on a second communication path;

20 a second receiver unit configured to receive a second command on a third communication path;

a second transmitter unit coupled to transmit a second corresponding command that corresponds to said second command on a fourth communication path; and

25 a bridge unit coupled to receive selected commands from said first receiver and said second receiver and configured to transmit commands corresponding to said selected commands upon a peripheral bus.

12. The computer system as recited in claim 11, wherein said input/output node further comprising a control unit coupled to control the conveyance of commands from said first communication path to said second communication path and to said peripheral bus, and from said third communication path to said fourth communication path and to said peripheral bus.
- 5
13. The computer system as recited in claim 12, wherein said control unit is further configured to control the conveyance of commands from said peripheral bus to said second communication path and said fourth communication path.
- 10
14. The computer system as recited in claim 13, wherein said bridge unit is further configured to selectively provide commands corresponding to commands received from said peripheral bus to said first transmitter and said second transmitter.
- 15
15. The computer system as recited in claim 14, wherein said control unit is further configured to selectively control the conveyance of said commands based upon a plurality of control commands received from said first receiver, said second receiver and said bridge unit.
- 20
16. The computer system as recited in claim 15, wherein each of said control commands contains a subset of a corresponding command received by said first and second receivers and said bridge unit.
- 25
17. The computer system as recited in claim 16, wherein said control unit is further configured to receive said control commands via a control command bus.

18. The computer system as recited in claim 11, wherein said peripheral bus is a peripheral component interconnect (PCI) bus.

19. The computer system as recited in claim 11, wherein said peripheral bus is a

5 graphics bus.

20. The computer system as recited in claim 11, wherein said first and third

communication paths and said second and fourth communication paths are

HyperTransport™ links.

10